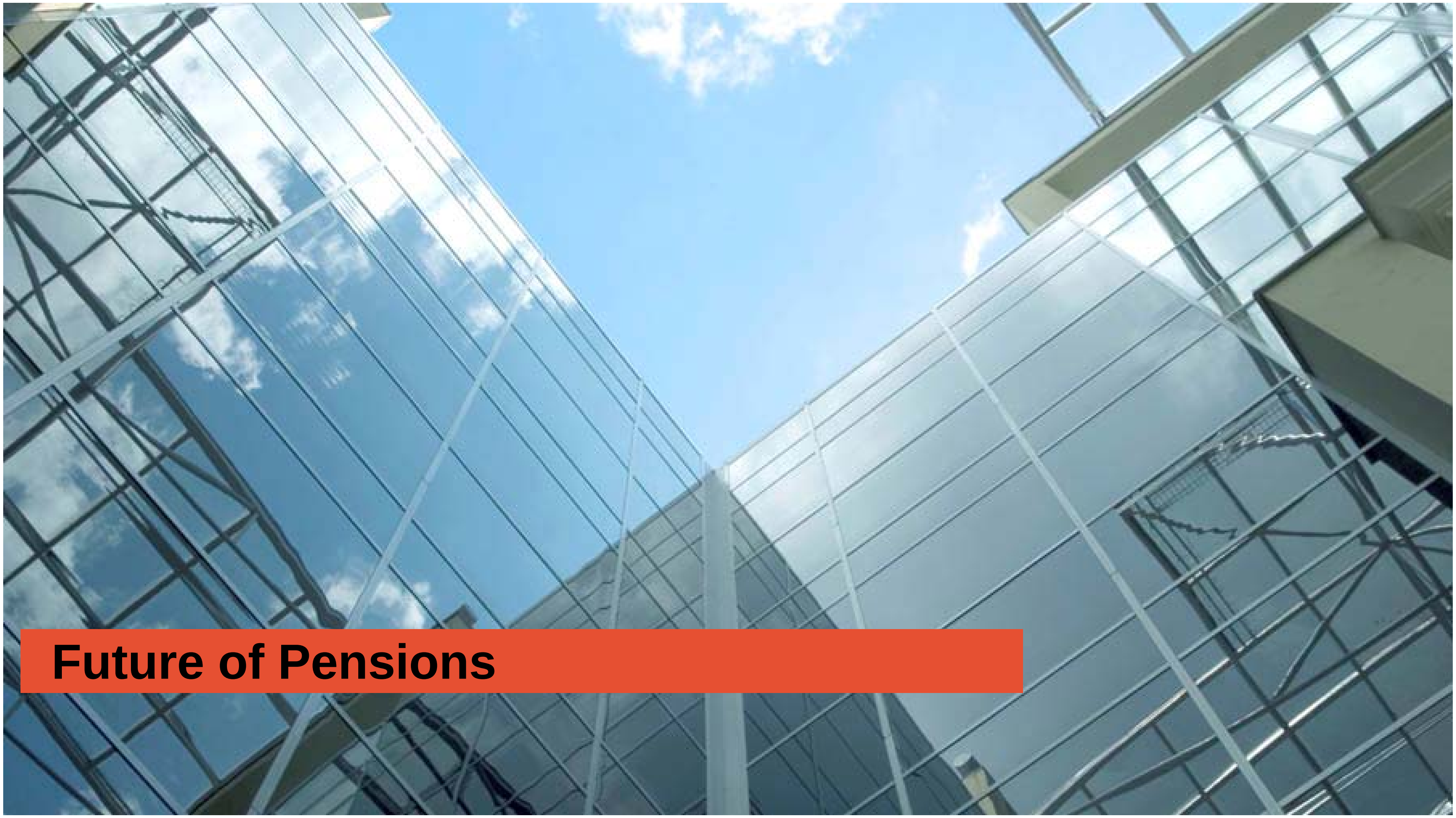

Future of Pensions

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TOWERS WATSON

The future of pensions

Where we have been…

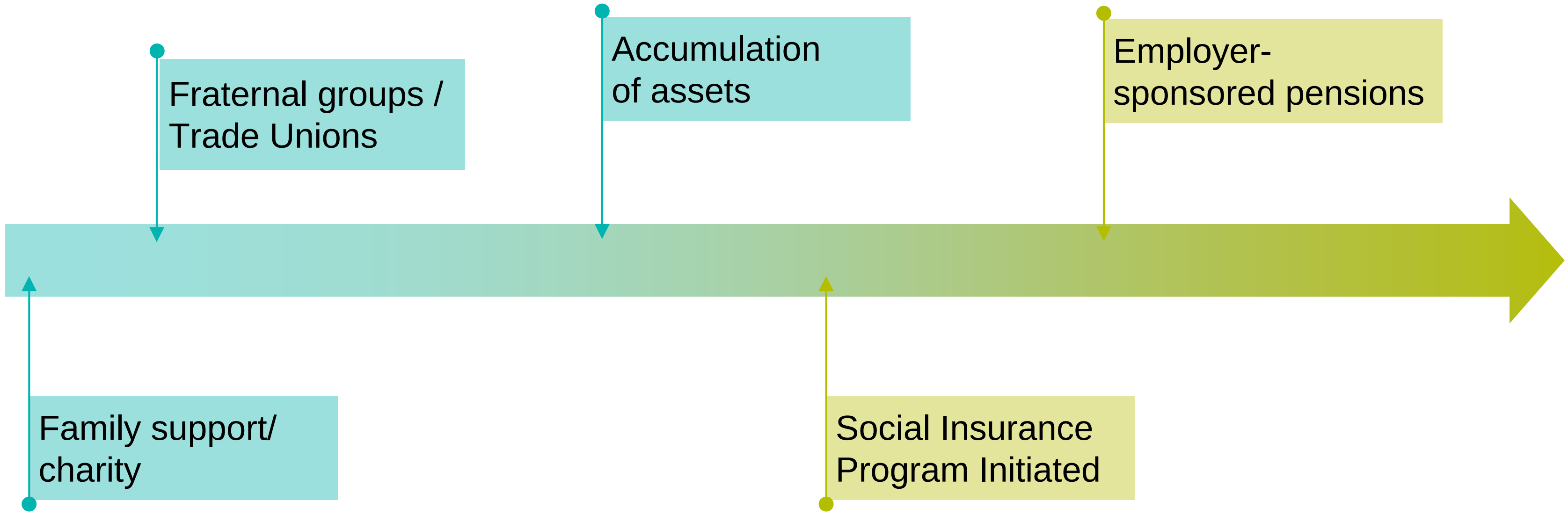
Where we are today…

Where we are headed…

What does this mean for pension actuaries…

Old age and economic risk

- Sources of economic insecurity
  - Decreased productivity
  - Longer life expectancy
  - Increased healthcare costs



Establishment of employer pension plans

- Employer incentives
  - Ability to reward long service employees
  - Systematic method to address decreased productivity among older employees and to create opportunities for younger employees
  - Union demands
  - Tax advantages
    - — Contributions are deductible, within limits
    - — Investment earnings on contributions are not taxed until distribution
  - Attraction / retention tool when wage stabilization program imposed limits on wage increases
- Employee advantages
  - No taxable income created when employers make contributions
  - Potential for lower tax rates when distributed
- Current magnitude of employer plan assets at December 2010
  - $2.2 trillion in DB plans and $4.5 trillion in DC plans

Growth of employer plans attracts oversight by various governing bodies

- Accounting perspective
  - Recognize the commitment undertaken by an employer sponsoring a pension plan

- Government perspective
  - Impose limits to the tax advantages granted to employers sponsoring pension plans
    - Deductible limits
    - Nondiscrimination requirements
  - Protect the benefits promised
    - Vesting, accrual, and anti-cutback requirements
    - Funding and insurance requirements

Where we are today

- Pension trust assets have substantial impact on company balance sheets
- Pension promises made long ago are increasing in cost
  - Increased life expectancy
  - Changing economic conditions
- Workforce is more mobile
- Changing regulatory environment
  - Movement toward “mark to market”
  - Less flexibility in determining minimum required contributions

External pressures "squeezing" the retirement system

Business Pressures

- Increasing benefit costs
- Cost volatility
- Shareholder pressure

Employee Pressures

- Career patterns changing
- DB plans not appreciated
- Change in expectations

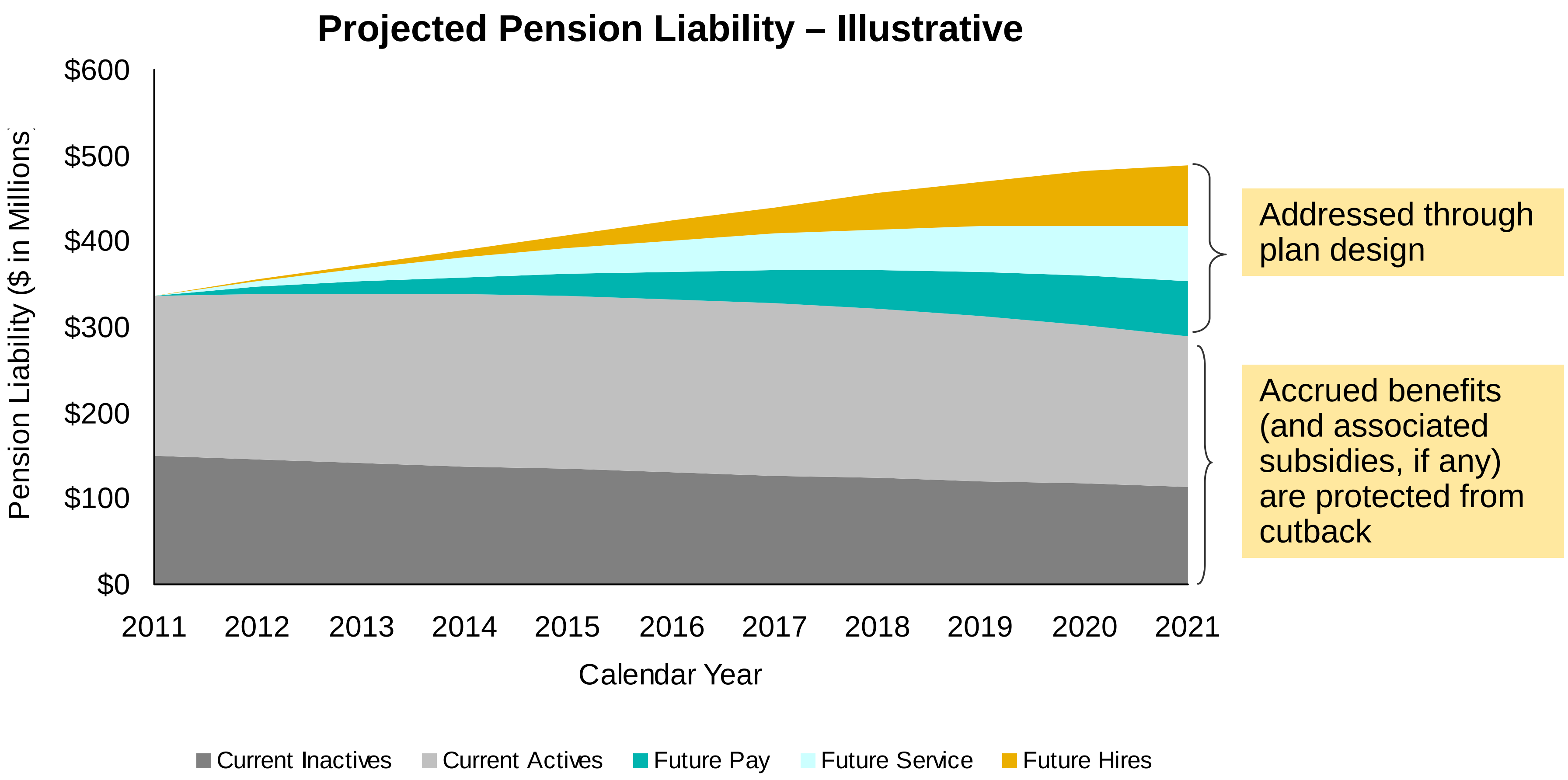
Environmental Pressures

- Economic uncertainty
- Industry dynamics
- Demographic shifts
- Legal challenges
- Pension reform

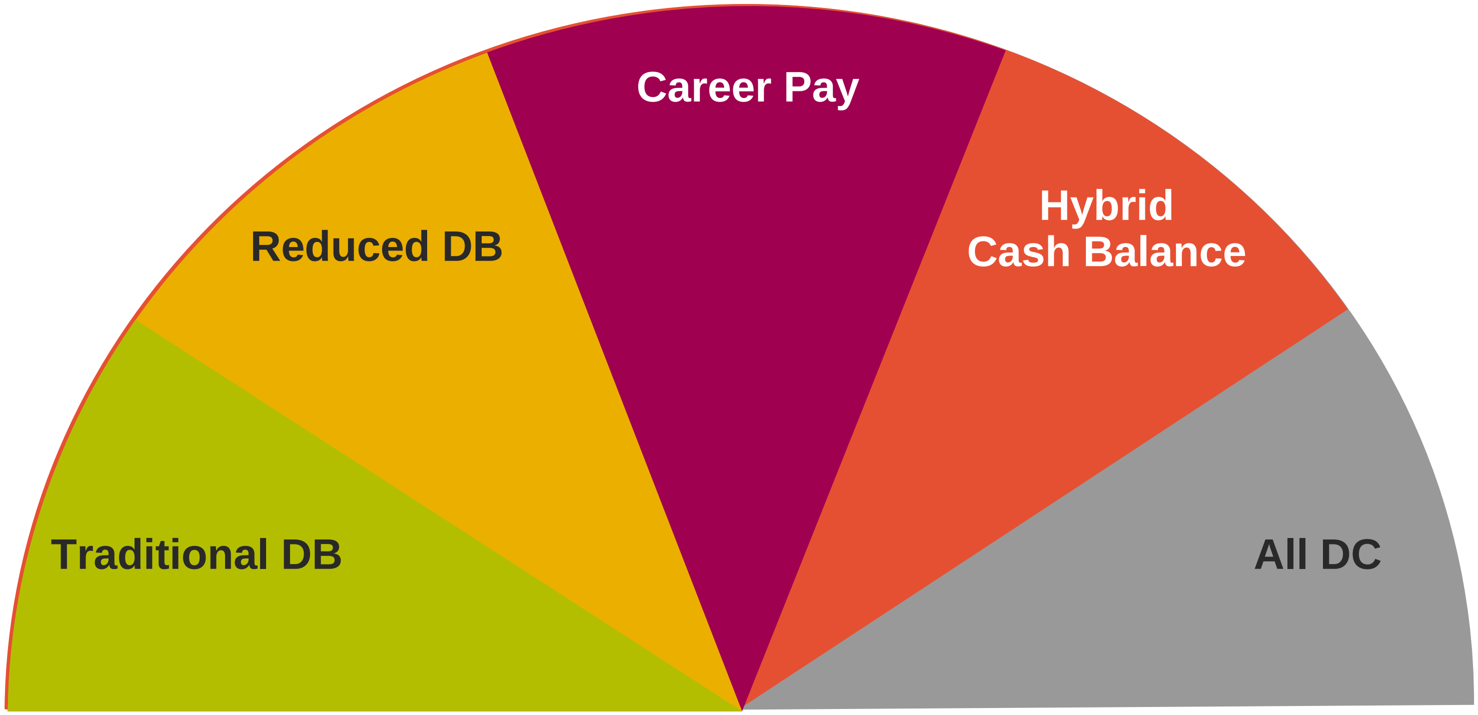
Trends

- Shift from Retirement Income to Wealth Accumulation
- Greater emphasis on Risk Management
- Elimination of early retirement subsidies
- General "downward" trend of size of plan
- Curtailment of traditional retiree medical plans

Plan sponsor options

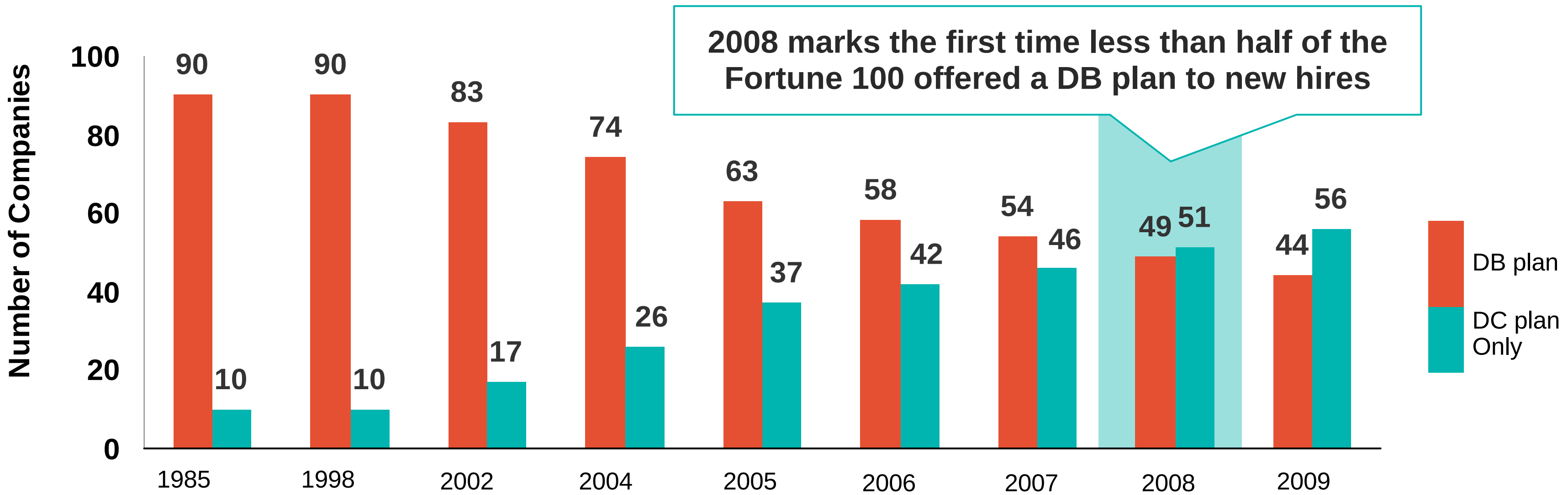


Retirement income plan design alternatives
Plan design spectrum



Plan sponsor risk is reduced by moving clockwise around the plan design spectrum

Fortune 100 retirement plan prevalence
For newly hired salaried employees



Total DB Pension Plans	**90**	**90**	**83**	**74**	**63**	**58**	**54**	**49**	**44**
Traditional DB Plan	89	67	49	40	34	30	28	24	20
Hybrid Plan	1	23	34	34	29	28	26	25	24*
DC Plan Only	**10**	**10**	**17**	**26**	**37**	**42**	**46**	**51**	**56**

Note: For most years, data is based on the following year's Fortune list. For example, 2007 data is based on the 2008 list. The 2009 column reflects data through January 25, 2010 (based on the 2009 Fortune list) and includes future announcements for plan changes in 2009 and 2010.
**88% of hybrid plans are cash balance plans*.

Primary retirement plan offered by Fortune 100
For newly hired salaried employees

Abbott Laboratories	Rite-Aid – 2002	CVS Caremark – 1997	Comcast	AT&T
Berkshire Hathaway	Ford Motor – 2003	Tyson Foods – 2004	Costco Wholesale	Bank of America Corp.
Chevron	Johnson Controls – 2006	Goldman Sachs – 2004	Dell	Caterpillar
Deere	Lockheed Martin – 2006	GMAC – 2006	Enterprise GP Holdings	CHS
Emerson Electric	International Paper 2004	Hewlett-Packard – 2006	HCA	Coca-Cola
Exxon Mobil	Alcoa – 2006	Sears Holdings – 2006	Home Depot	ConocoPhillips
General Electric	DuPont – 2007	Sprint Nextel – 2006	Humana	Dow Chemical
Hess	General Dynamics – 2007	Verizon – 2006	Ingram Micro	FedEx
Intel	General Motors – 2007	WellPoint – 2006	Lowe's	Honeywell International
Johnson & Johnson	Morgan Stanley – 2007	Kroger – 2007	Microsoft	J.P. Morgan Chase
Liberty Mutual Insurance	Philip Morris – 2008	AmerisourceBergen – 2007	Plains All American	Macy's
Murphy's Oil	News Corp. – 2008	IBM – 2008	Proctor & Gamble	Medco Health Solutions
New York Life Insurance	Northrop Grumman – 2008	Citigroup – 2008	TIAA-CREF	MetLife
PepsiCo	Boeing – 2009	American Express – 2007	UnitedHealth Group	Prudential Financial
Pfizer	Kraft Foods – 2009	Supervalu – 2008	Walgreen	Safeway
State Farm Insurance	Sunoco – 2009	Motorola – 2009	Wal-Mart Stores	Target
Sysco	Wells Fargo – 2009	Apple	Archer Daniels	Time Warner
Tesoro	3M – 2009	Best Buy	MidlandMarathon Oil	Travelers Cos.
Valero Energy	Occidental Pet – 1983	Cardinal Health	Aetna	United Parcel Service
Walt Disney	McKesson – 1997	Cisco Systems	Allstate	United Technologies

Traditional DB   DC (Closed DB)   DC (Frozen DB)   DC   Hybrid DB

Appeal of DC programs

- Employer Perspective
  - Reduce cost volatility
  - Predictability of costs
  - Higher employee appreciation of retirement benefits

- Employee Perspective
  - Portable benefits
  - Level accrual pattern is attractive
  - Easy to understand

- Downside?

Risk is never eliminated, but rather is shifted
DC plans shift more risk to employees

Employees who Outlive their Life Expectancy	Men	Women
By at Least 1 Year	59%	73%
By more than 10 years	21%	36%

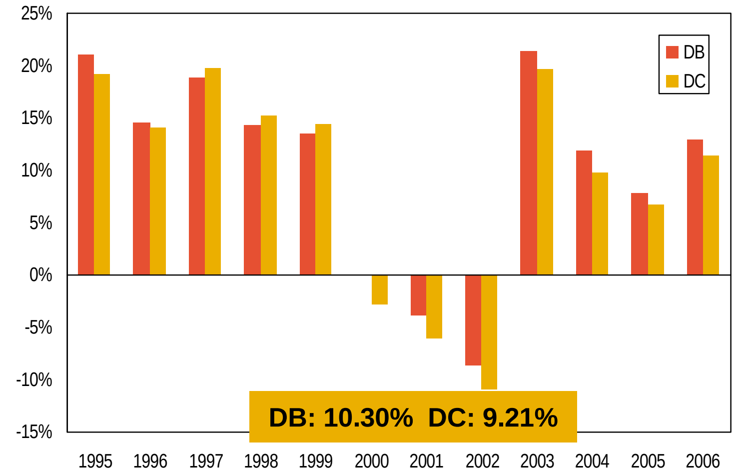
Mortality Risk

- Account plans do not spread mortality risk
- In a traditional DB plan, monies for employees who die earlier than expected go to pay benefits of those that die later than expected

Investment Risk

- DB plans outperformed DC Plans
- Employees are less sophisticated investors
- Employees don't have ready access to expert advice
- Employees need to diversify along their life-cycle

Average Median Returns From 1995 – 2006

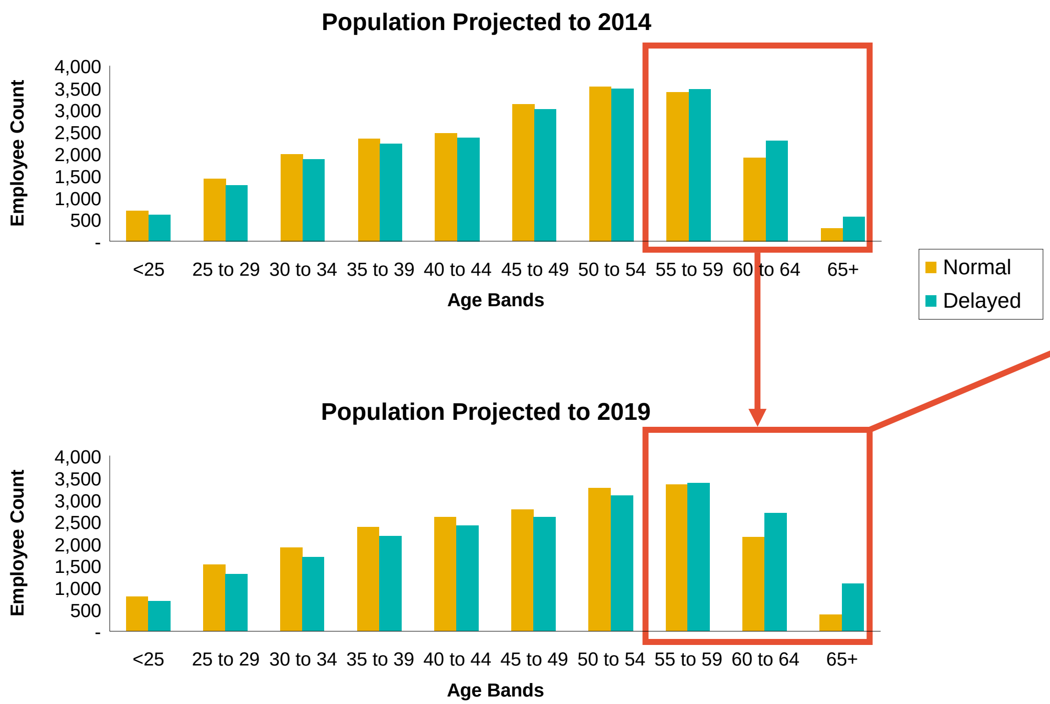


DC plan weaknesses have been highlighted during recent financial crisis

- Many 401(k) plans are "designed" as successful retirement plans, but most are falling short because the failure of one element can result in a significant reduction in the final retirement benefit
- Overall success in a 401(k) plan most likely means hitting a "bulls-eye" in every component of the plan:
  - high/long-term employee deferrals
  - a good match and/or profit sharing contribution
  - good investment earnings over a long period of time
  - rolling over payouts
  - reasonable fees
- Even if the final accumulation is sufficient, the actual payout approach may cause the retiree's retirement strategy to fail
  - Little plan sponsor interest in "in plan options" even after economic crisis
    - — Lack of participant demand
    - — Unsatisfactory market offers
    - — Administrative complexity

In response, employees are attempting to delay retirement

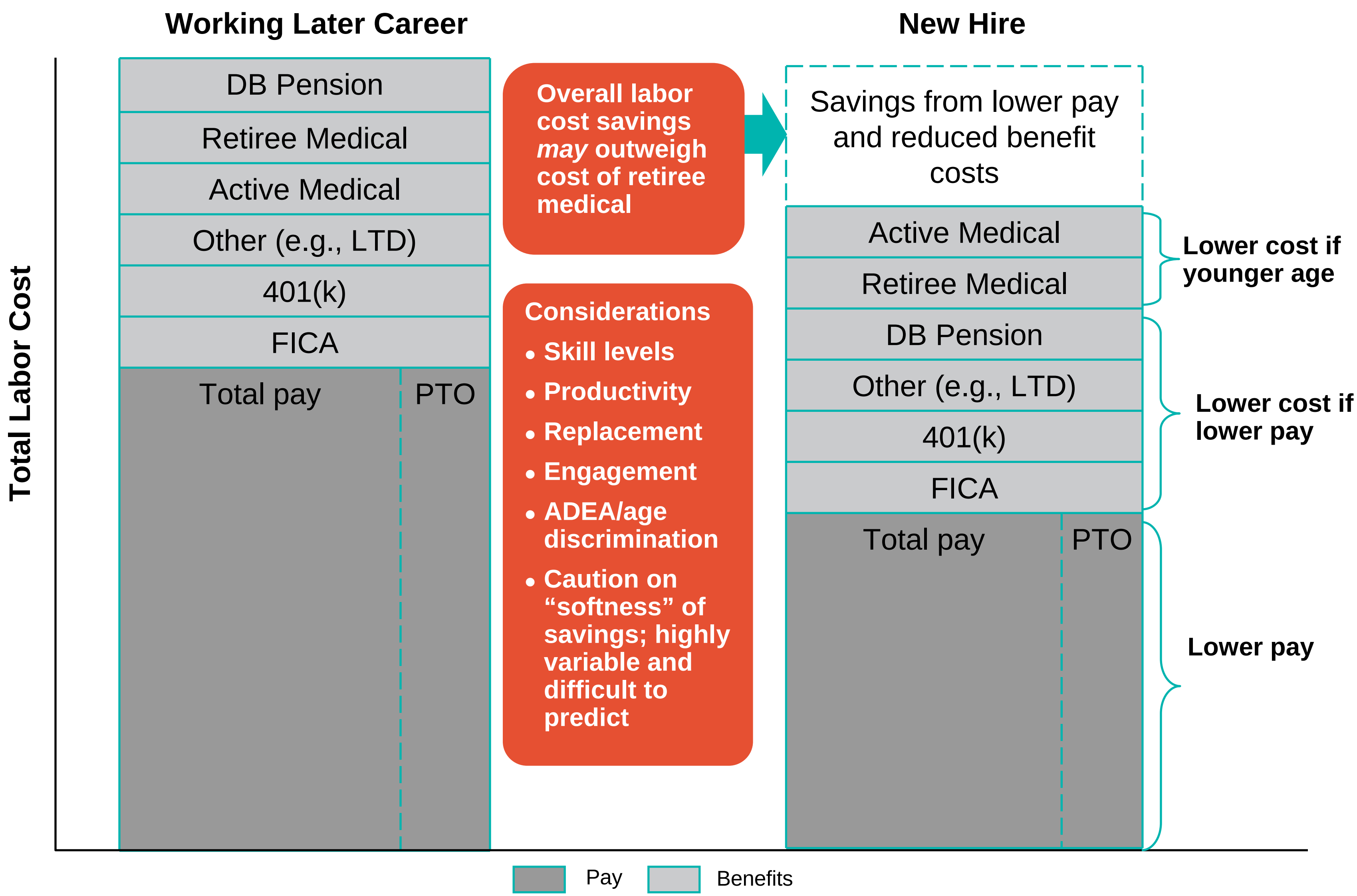
- Surveys uniformly indicate expectation of later retirement
  - Towers Watson, Benefits in Crisis, February 2009 — 55% of employers are experiencing delays in retirement
  - EBRI, 2009 Retirement Confidence Survey, April, 2009 — 25% of employees have postponed anticipated retirement date in past year
  - Pew Research Center Survey — 63% of workers between 50 and 61 are delaying retirement due to the recession



Labor Cost Risk

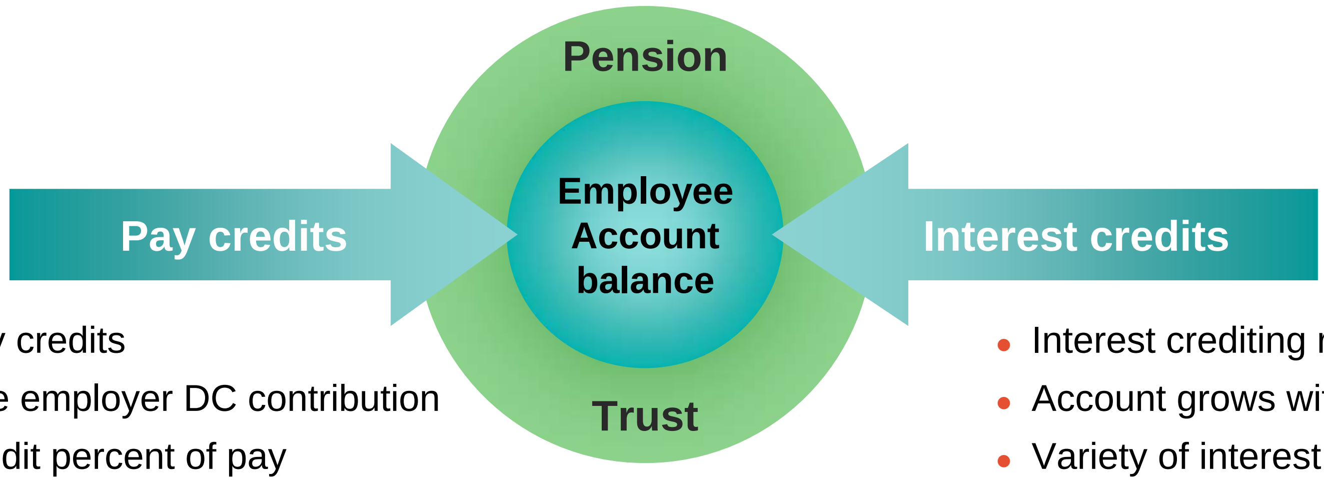
Over time, broad deferral of retirement causes a reduction in the velocity of worker replacement and potentially increasing operational cost

Potential increased labor costs and reduced employee engagement if older workers are unable to retire — illustrative



Rethinking DB design: cash balance plans are back in play

- Each employee has a notional account
- Employer retains control over assets
  - Potential to earn excess returns over interest credit, which would result in reduced cost to company
- Benefit generally less volatile than DC since usually linked to conservative market benchmark



- Pay credits
- Like employer DC contribution
- Credit percent of pay
- Variety of formulas
  - Flat percentage
  - Vary by service
  - Vary by age
  - Vary by age + service

- Interest crediting rate
- Account grows with interest
- Variety of interest crediting rates*:
  - Flat rate
  - Government bond-based
- Equity market index-based?

* IRS guidance pending.

Cash balance plans are designed to leverage advantages of DB and DC plans

DB plan features

- Employer retains tax advantages on investment returns
- Efficiency of DB funding
  (leverage superior investment returns of employer versus individuals)
- Accrued benefit cannot decrease

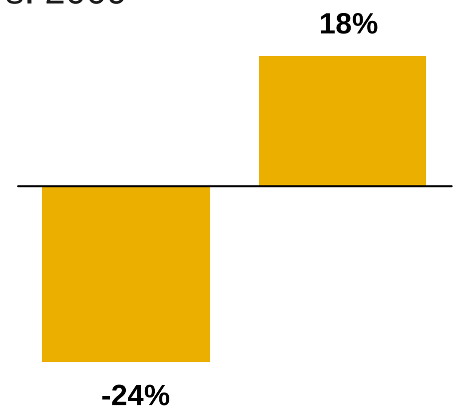
DC plan features

- Reduce cost volatility
- Valuable benefits for a mobile workforce
- Level accrual pattern rather than backloading towards end of career
- Portable, account based plans that are easy to understand

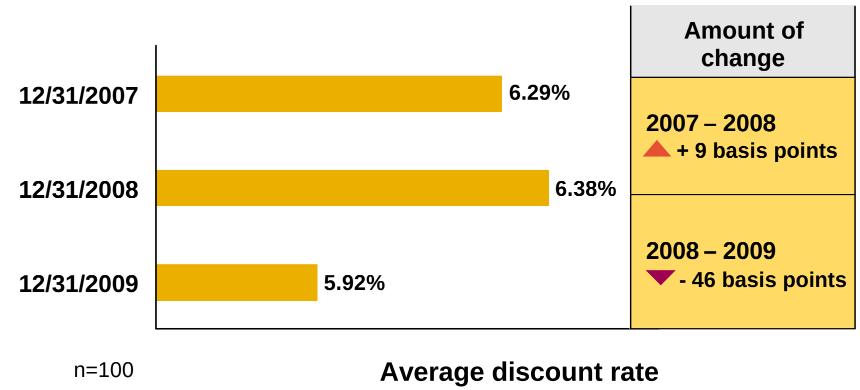
Capital market volatility has created a wide range of funded status levels, with many plans still poorly funded

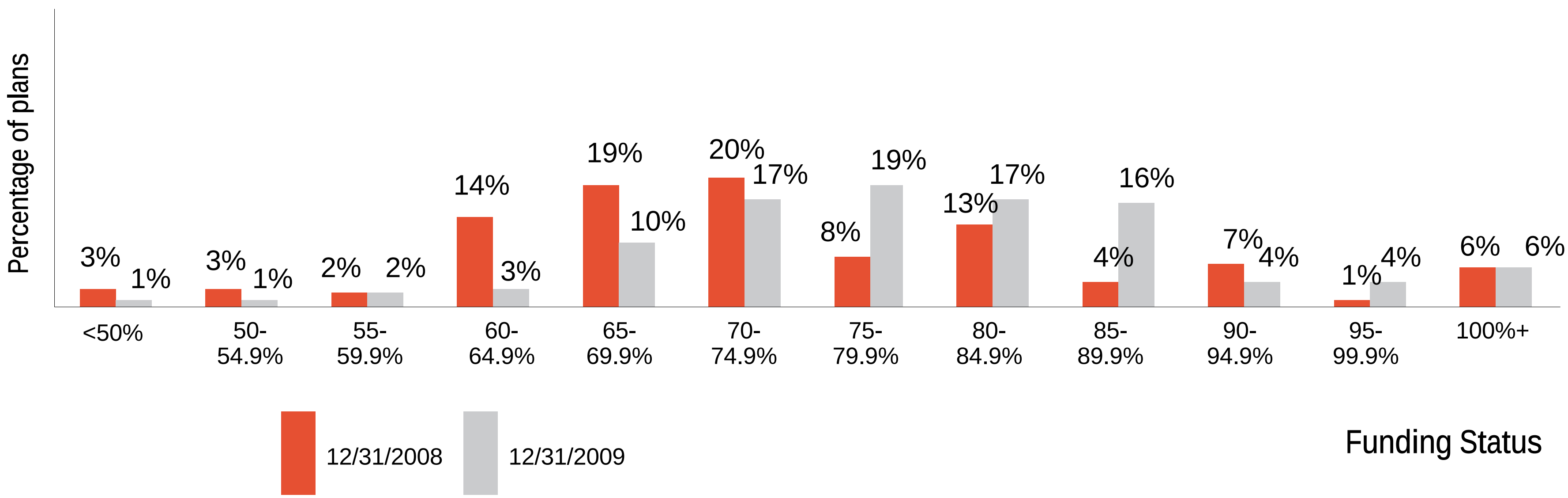
Average investment returns on plan investments for top 100 pensions

2008 vs. 2009

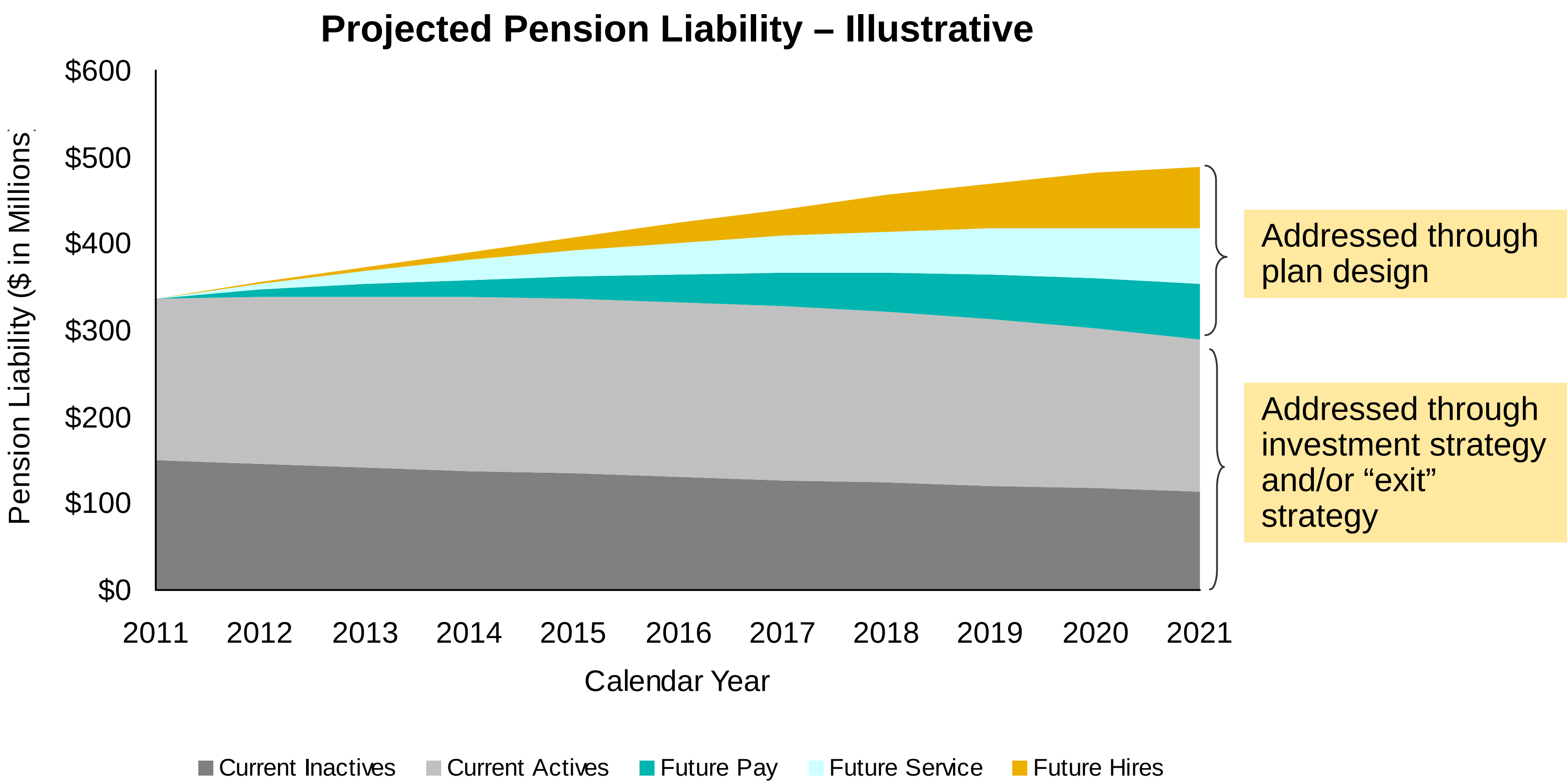


Average discount rate for top 100 pensions





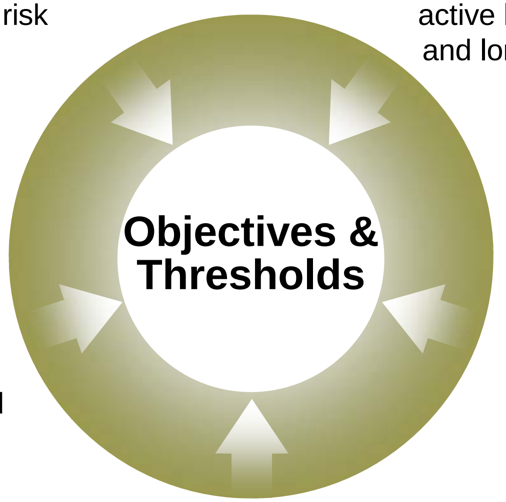
Can this volatility and risk be managed?



Pension risk management framework

LEGACY BENEFIT / EXIT STRATEGY
Effective at managing size of plan and overall risk exposure

ONGOING BENEFIT STRATEGY
Effective at managing active liability risk profile and long-term plan cost



FUNDING STRATEGY
Effective at managing short-term plan cost and volatility

ASSUMPTIONS AND METHODS
Effective only for short-term issues and cost recognition timing

INVESTMENT STRATEGY
Effective at managing long-term plan cost and volatility

- Regardless of the situation, the goal is to identify the key objectives and thresholds that impact the plan sponsor
- This framework allows for parallel assessment of multiple plan management options

Sample of investment and exit/transfer strategies

	Risk Mitigation Tactic	Description
Management Strategies	**Funding Strategy**	Systematically increase funding when cash is available. Minimum funding needs to be maintained in the short-term to maximize flexibility
	Current Investment Strategy	Shift to long corporate bonds to better match plan termination liability
	Dynamic Equity Reduction	Reduce equity risk as funded status improves. Equity allocation is currently needed to finance market deficit
	Interest Rate Risk Management	Use fixed income investments and synthetic instruments to hedge the risk of general interest rate changes
	Retiree Buy-in	Purchase annuities for a portion of the retiree obligation as an investment of the plan in lieu of shift to long corporate bonds. Additional review required
Transfer Strategies	**Annuity Purchase**	Purchase annuities for a cost-efficient group of employees (generally, retirees). Funded status and accounting settlement make alternative unattractive
	Lump Sum Exercise	Amend plan to offer lump sum payouts to deferred members and offer cost-efficient transfer to 401(k) or IRA. Not viable until 2012 or beyond
	Plan Termination	Transfer 100% of risk to a third party (either through lump sum payouts or annuity purchase). Typically takes 18 mo., and may be done in stages (retiree annuity purchase, cash-out exercise, final annuity purchase)

Need for pension actuaries

- Plan sponsors seeking DB plan exit strategy
  - Seek to increase the effectiveness of defined contribution plans
    - — Must create a framework for employees to reach a level of benefits adequacy that will allow for a reasonable retirement age
  - Legacy obligations must be addressed
    - — Ongoing valuations until all liabilities are settled
    - — Must manage short term issues, funding strategy
    - — Implement effective investment strategy
    - — Develop exit strategy, manage risk exposure
- Plan sponsors seeking to maintain DB program
  - More integrated approach to managing pension
    - — Ongoing valuations
    - — Must manage short term issues, funding strategy
    - — Implement effective investment strategy
    - — Manage risk exposure, stress testing
- New plan sponsors?